

CLAIMS

We claim:

1. A mobile data reading system for reading bulky data-associated articles being manually handled by a user, the system comprising:

a frame mounted on rollers to facilitate moving the frame over a support surface to selected locations;

a reader having a reader head mounted to the frame for receiving a data signal from a data-associated item to be read when the article is brought within a proximal distance to the reader head without requiring handling of the reader head by the user during scanning of articles;

a data storage device for receiving and storing data associated with the received data signal; and

a power supply for supplying power to the reader.

2. The mobile data reading system of claim 1, further comprising:

at least one hand-held reader station mounted to the frame for receiving a hand-held data reader.

3. The mobile data reading system of claim 1, wherein:

the reader head is articulable for orienting the reader head at different orientations.

4. The mobile data reading system of claim 1, wherein:

the reader is an optical scanning device.
5. The mobile data reading system of claim 1, wherein:

the bulky data associated articles include containers of mail.
6. The mobile data reading system of claim 5, wherein:

the containers of mail include at least one of bags, boxes, tubs and trays.
7. The mobile data reading system of claim 1, wherein:

the power source includes a battery mounted to the frame.
8. The mobile data reading system of claim 1, wherein:

there are two hand-held reader stations mounted to the frame for receiving two hand-held data readers.
9. The mobile data reading system of claim 1, wherein:

the reader head is located at a position at least 3.5 feet above the support surface.
10. The mobile data reading system of claim 1, wherein:

the proximal distance is 1 meter or less.

11. The mobile data reading system of claim 1, wherein:

the handheld data reader includes a handheld computer with an optical scanner.

12. The mobile data reading system of claim 1, wherein:

the data storage device includes at least one hand-held data reader removably mounted to the frame.

13. The mobile data reading system of claim 1, further comprising:

a reader head shroud that covers the reader head for providing a .

14. The mobile data reading system of claim 1, further comprising:

a heat transfer device coupled to the reader head for transferring heat away from and to the reader head.

15. A self-contained mobile data reading system for reading data associated with mail containers having data indicia thereon for tracking mail containers being transported by aircraft, the system comprising:

a frame mounted on rollers to facilitate moving the frame over a support surface to selected locations;

an optical scanning device having an optical scanner mounted to the frame for projecting a scanning field for reading optically scanned data indicia of the mail containers when the data indicia is brought within the scanning field of the optical scanner without requiring handling of the optical scanner by the user, the optical scanning device providing at least one of a audible or visual notification upon completion of a successful scan of the data indicia;

a data storage device for receiving and storing data associated with the received data signal;

at least one hand-held reader station mounted to the frame for receiving a hand-held data reader having a hand-held optical scanner; and

a battery power supply mounted to the frame for supplying power to at least one of the optical scanning device and the hand-held reader station.

16. The mobile data reading system of claim 15, wherein:

the data storage device includes the hand-held data reader.

17. The mobile data reading system of claim 15, wherein:

the optical scanner is mounted on an articulable arm for orienting the optical scanner at different positions and orientations.

18. The mobile data reading system of claim 15, wherein:

the mail containers include at least one of a bag, box, tub and tray.

19. The mobile data reading system of claim 15, wherein:

there are two hand-held reader stations mounted to the frame for receiving two hand-held data readers.

20. The mobile data reading system of claim 15, wherein:

the optical scanner is located at a position at least 3.5 feet above the support surface.

21. The mobile data reading system of claim 15, wherein:

the scanning field has a maximum effective range of 1 meter or less.

22. A method of tracking articles being shipped comprising:

providing a plurality of articles to be tracked with identifying data associated therewith at a first location;

moving a mobile data reading system from a remote location to the first location for reading the identifying data, the mobile data reading system including:

a frame mounted on rollers to facilitate moving the frame over a support surface to selected locations;

a reader having a reader head mounted to the frame for receiving a data signal from a data-associated item to be read when the item is brought within a proximal distance of the reader head without requiring handling of the reader head by the user, the reader providing at least one of an ;

a data storage device for receiving and storing data associated with the received data signal mounted on the frame; and

a power supply for supplying power to the reader;

performing a reading operation at the first location by manually bringing each of the articles with identifying data within the proximal distance of the reader head so that the identifying data is read by the reader without handling of the reader head by one performing the reading operation, the reader providing at least one of a audible or visual notification upon completion of a successful scan of the data indicia;

storing the read identifying data within the data storage device; and

moving the mobile data reading system from the first location to a second location upon completion of the reading operation.

23. The method of claim 22, wherein:

the data storage device includes a hand-held reader removably mounted to the frame.

24. The method of claim 22, further comprising:

sorting the articles into discrete groups based upon shipping destination of the articles upon performing the reading operation;

downloading the stored read identifying data from the data storage device with a portable data reading device that is brought into proximity to the data storage device upon sorting of the articles; and

uploading the downloaded data from the portable data reading device to a central database.